

상염색체우성다낭신 환자에서 간부피에 따른 복부증상과 영양상태의 변화

서울대학교병원 내과학교실¹, 을지대학교병원 내과학교실²

류현진¹, 김현숙¹, 박혜인조¹, 장현화¹, 조은주¹, 조형아¹, 오국환¹, 황영환², 안규리¹

Height-Adjusted Total Liver Volume Affects Abdominal Symptoms and Nutritional Status in ADPKD Patients

Hyun Jin Ryu¹, Hyunsuk Kim¹, Hayne Cho Park¹, Hyunhwa Jang¹, Eun Joo Joe¹
Hyungah Jo¹, Kook-Hwan Oh¹, Young-Hwan Hwang², Curie Ahn¹

Department of Internal Medicine¹, Seoul National University Hospital, Seoul, Korea
Department of Internal Medicine², Eulji General Hospital, Seoul, Korea

Introductions and Aims: Polycystic liver has not been received much attention as a treatment target because it is often asymptomatic. However, as liver cyst grows, it occasionally results in serious morbidity and mortality. We investigated the effect of height-adjusted total liver volume (htTLV) on abdominal symptoms and nutritional status in autosomal dominant polycystic kidney disease (ADPKD) patients with polycystic liver.

Methods: We conducted a cross-sectional study with ADPKD patients who were registered at PKD clinic in Seoul National University Hospital. TLV was measured by stereotactic volumetry using abdominal computed tomography (CT) scan and adjusted by the height. We evaluated chronic symptoms related to hepatic cysts by questionnaire and identified complications by medical record review. Subjective global assessment (SGA) was performed to assess nutritional status. The clinical and anthropometric risk factors were analyzed according to htTLV (group 1 $\geq 1,800$ mL/m vs. group 2 $< 1,800$ mL/m).

Results: A total of 112 patients (54 male, 58 female) were included in the analysis. Mean age was 51 years and their mean eGFR was 57.9 ± 24.5 mL/min/1.73m². Mean htTLV was 1320.6 ± 870.3 mL/m and mean htTKV was 902.5 ± 551.1 mL/m, respectively. Group 1 (n=15) was older (55.5 ± 8.3 vs. 50.5 ± 11.9 years old, $p=0.077$), had higher female proportion (73.3% vs. 48.5% , $p=0.073$), lower plasma hemoglobin level (12.2 ± 0.7 vs. 13.3 ± 1.6 g/dL, $p=0.003$), lower mean estimated GFR (46.5 ± 15.9 vs. 59.7 ± 25.2 mL/min/1.73m², $p=0.066$), and larger htTKV (1285.3 ± 23.4 vs. 843.3 ± 472.3 mL/m, $p=0.03$) than group 2 (n=97). The most common symptom was back pain (61.9%) followed by flank pain (52.4%). Group 1 showed a higher prevalence of early satiety (66.7% vs. 18.1%, $p=0.001$), mass sensation (58.3% vs. 23.6%, $p=0.033$), and abdominal fullness (91.7% vs. 44.4%, $p=0.002$). In addition, group 1 showed lower SGA score compared to group 2 (5.7 ± 1.1 vs. 6.5 ± 0.6 , $p=0.002$).

Conclusions: ADPKD patients with large htTLV showed more frequent chronic abdominal symptoms and poor nutritional status. Chronic symptoms and nutritional risk must be considered when deciding treatment modality for polycystic liver.

Key Words: 상염색체우성다낭신질환, 영양, 다낭성간질환

Autosomal polycystic kidney disease, Nutritional status